Appl. No. 10/849,573 Amdt. dated September 22, 2009 Reply to Office Action of May 22, 2009

## **Amendments to the Specification:**

## Please add the following new paragraph after paragraph [0041]:

[0042] When defining a refractive shape for treating a vision condition in a particular patient, it is helpful to determine the pupil diameter parameter of the particular patient. Pupil diameters can be measured by, for example, a pupillometer. Pupil diameter parameters can involve, for example, the patient's pupil diameter as measured under certain distance and lighting conditions, such as under photopic conditions while the patient gazes at infinity (distance-photopic). Pupil diameter parameters can also involve pupil diameter measurements under other conditions such as distance-mesopic, distance-scotopic, near-photopic, near-mesopic, or near-scotopic. Still further additional measurements at other viewing conditions, such as at intermediate distances and/or moderate lighting conditions, may also be measured.